

K. Aushal

CRF Error Corrected by the STIC Systems Branch

CRF Processing Date: 11/15/99

Edited by: [Signature]

Verified by: [Signature] (STIC staff)

Serial Number: 09/205,658

☐ Changed a file from non-ASCII to ASCII

☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.

☐ Edited a format error in the Current Application Data section, specifically:

MAR 22 2000

TECH CENTER T600/2600

☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other

☐ Added the mandatory heading and subheadings for "Current Application Data."

☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically:

☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:

☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

☐ Inserted colons after headings/subheadings. Headings edited included:

☐ Deleted extra, invalid, headings used by an applicant, specifically:

☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as

☐ Inserted mandatory headings, specifically:

☐ Corrected an obvious error in the response, specifically:

☐ Edited identifiers where upper case is used but lower case is required, or vice versa.

☐ Corrected an error in the Number of Sequences field, specifically:

☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

☐ Deleted **ending** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected:

Other: Seq 11 - moved cumulative base totals over to left

\*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

PAGE: 1

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/205,658

DATE: 11/15/1999

TIME: 10:50:18

Input Set: I205658.RAW

This Raw Listing contains the General  
Information Section and those Sequences  
containing ERRORS.

```

1  <110> Ruvkun, Gary
2      Ogg, Scott
3  <120> THERAPEUTIC AND DIAGNOSTIC TOOLS FOR
4      IMPAIRED GLUCOSE TOLERANCE CONDITIONS
5  <130> 00786/351004
6  <140> US/09/205,658
7  <141> 1998-12-03
8  <150> 08/857,076
9  <151> 1997-05-15
10 <150> 08/888,534
11 <151> 1997-07-07
12 <150> US98/10080
13 <151> 1998-05-15
14 <160> 328
15 <170> FastSEQ for Windows Version 4.0

```

Does Not Comply  
Corrected Diskette Needed

## ERRORED SEQUENCES FOLLOW

```

E--> 16  <210> 11
      17  <211> 5816
      18  <212> DNA
      19  <213> Caenorhabditis elegans
      20  <220>
      21  <221> misc_feature
      22  <222> (1)...(5816)
      23  <223> n = A,T,C or G
      24  <400> 11
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W--> 26
E--> 27  a aaatttgga      180gaagagaatc tcggcccgag ctgctcgctg acgacttcaa caaccgctgc ca
W--> 28
E--> 29  gacgacgagc acatcacaat gagacggctt      360cgacttgta aaaattcgcg gacgcggcgt agaa
W--> 30
E--> 31  cattaatg cttttactgc tattcgcttt tgtacagccg tgtgcctcaa      540tagtcgaaaa acgatg
W--> 32      660gcacagtggg ggaagggttcg ctgacaatct catttgact gaaacacaag acaaaagcac
E--> 33  ctgaagga ttagtggatt      840tgcgtaaaat tttcccaaat cttcgtgtaa ttggaggccg ttcgct
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E--> 35  ataatc gaaaactgtg ctacacgaaa acgattgatt      1020ggaaacattt gatcacttct tccatcaa
W--> 36
E--> 37  gtca ttatttgag gaaaagaatc aggaacaagg tgtcgaaaga gttcagagtt      1200gttggtcgaa
W--> 38
E--> 39  gcgggt      1320gtgagcgtgt gaatgatgcc acagcatgcc acgcgtgcaa gaatgtctat cacaaggg

```

*more  
cumulative  
base totals  
over to  
left*

PAGE: 2

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/205,658

DATE: 11/15/1999  
TIME: 10:50:18

Input Set: I205658.RAW

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E--> 44      0acatgttccg gaattttacga cgtattgagg caaagtcact gttcagaaat ctatatgcta      1860tca
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E--> 46      ag tatatcaagc      1980agctaattgtc aaagttaa ataccactcg atccgataga tcaatcagaa g
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E--> 48      acattaccga tatagatcag cgaaagtttc      2160tcgggtacga gctcttcttc aaagaagtcc cac
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E--> 50      ccgaccccg gacattttta tggatattgg accgcgcgag cgaattcggc      2340cgaatacgct ctacg
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E--> 54      atcgaag aatcatcgga acagaacaag aagaagcgac      2820cggatccgat gtcggcgatc gaatcat
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E--> 56      ttgga aaaagctgaa aatttgggaa aagctccaaa aactctcggg ggaaagaagc      3000cgctgatcc
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E--> 58      acaagga      3120ttcgggtcta cgagatctac gaacctttac ccggaagctg ggcgattaat gtatcag
W--> 59
E--> 60      gcac tcgtcaata tcccatcgtg      3300cgggagcatt gaaacgaaca aaacacatca cagacattg
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E--> 62      ttc ggttatgttg taaagcttaa gtcaaaagtc gatggatcaa      3480ttgttatgac gagatgtgtc
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E--> 65      gct ctatctgact      3780ttatgcaatt gaatcccgaa tattgtgtgg acaataagta caatgcagac
W--> 66
E--> 67      c tgatgggtga tcgtttcgga ccgtgtgcta      3960ttaagattaa tgtagatgat ccagcgtcga ct
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E--> 69      gatggttgtg atggaaatga tggatcttgg aaatctccgt gactatctcc      4140gatcgaaacg cgaa
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E--> 71      t      4260cgctcaagtt ttgccatcga gatctcgccg cacgtaattg catgataaat cgggatgaga
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E--> 73      cgagtcgttg aaagacggaa      4440agtttgactc gaaatctgat gtttggagct tcggagttgt tctc
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E--> 75      cgaatgtt gtgaaaacta ttggtataag gtgatgaaaa      4620tgtgctggag atactcacct cgggat
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E--> 83      acat ttaaatgatg atgattatgt tgaaaaagag atatcatcca      5280tgatagcgc ccggagcacg
E--> 84      400cagcagcagc agcagcagct ctccaacagc aacaaaatgg tggtcgaggc gatcgattaa      5460c
W--> 85
E--> 86      aaac ggcaacagcc      5580gtgacatttt caacggacgt tcggctttcg gtgaaaatga gcatctaac
W--> 87
E--> 88      tc ggattttttt tcagattttt tctgaaaaat      5760tctgaataat tttaccccat ttttcaaac t

```

MAR 22 2000

DATE: 11/16/1999

TECHCENTER 16005200

PAGE: 1

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/205,658

Input Set: I205658.RAW

This Raw Listing contains the General Information  
Section and up to first 5 pages.

1 <110> APPLICANT: Ruvkun, Gary  
2 Ogg, Scott  
3 <120> TITLE OF INVENTION: THERAPEUTIC AND DIAGNOSTIC TOOLS FOR  
4 IMPAIRED GLUCOSE TOLERANCE CONDITIONS  
5 <130> FILE REFERENCE: 00786/351004  
6 <140> CURRENT APPLICATION NUMBER: US/09/205,658  
7 <141> CURRENT FILING DATE: 1998-12-03  
8 <150> EARLIER APPLICATION NUMBER: 08/857,076  
9 <151> EARLIER FILING DATE: 1997-05-15  
10 <150> EARLIER APPLICATION NUMBER: 08/888,534  
11 <151> EARLIER FILING DATE: 1997-07-07  
12 <150> EARLIER APPLICATION NUMBER: US98/10080  
13 <151> EARLIER FILING DATE: 1998-05-15  
14 <160> NUMBER OF SEQ ID NOS: 328  
15 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
16 <210> SEQ ID NO 1  
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18 <212> TYPE: DNA  
19 <213> ORGANISM: Artificial Sequence  
20 <220> FEATURE:  
21 <223> OTHER INFORMATION: Primer/probe derived from C. elegans  
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24 <210> SEQ ID NO 2  
25 <211> LENGTH: 18  
26 <212> TYPE: DNA  
27 <213> ORGANISM: Artificial Sequence  
28 <220> FEATURE:  
29 <223> OTHER INFORMATION: Primer/probe derived from C. elegans  
30 <400> SEQUENCE: 2 18  
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32 <210> SEQ ID NO 3  
33 <211> LENGTH: 20  
34 <212> TYPE: DNA  
35 <213> ORGANISM: Artificial Sequence  
36 <220> FEATURE:  
37 <223> OTHER INFORMATION: Primer/probe derived from C. elegans  
38 <400> SEQUENCE: 3 20  
39 tgatgcgaac ggcatcgat  
40 <210> SEQ ID NO 4  
41 <211> LENGTH: 20  
42 <212> TYPE: DNA  
43 <213> ORGANISM: Artificial Sequence  
44 <220> FEATURE:

PAGE: 2

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/205,658DATE: 11/16/1999  
TIME: 16:33:52

Input Set: I205658.RAW

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48 <210> SEQ ID NO 5  
49 <211> LENGTH: 22  
50 <212> TYPE: DNA  
51 <213> ORGANISM: Artificial Sequence  
52 <220> FEATURE:  
53 <223> OTHER INFORMATION: Primer/probe derived from C. elegans  
54 <400> SEQUENCE: 5 22  
55 ggtttaatta cccaagtttg ag  
56 <210> SEQ ID NO 6  
57 <211> LENGTH: 20  
58 <212> TYPE: DNA  
59 <213> ORGANISM: Artificial Sequence  
60 <220> FEATURE:  
61 <223> OTHER INFORMATION: Primer/probe derived from C. elegans  
62 <400> SEQUENCE: 6 20  
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64 <210> SEQ ID NO 7  
65 <211> LENGTH: 20  
66 <212> TYPE: DNA  
67 <213> ORGANISM: Artificial Sequence  
68 <220> FEATURE:  
69 <223> OTHER INFORMATION: Primer/probe derived from C. elegans  
70 <400> SEQUENCE: 7 20  
71 tgatgcgaac ggcatcgat  
72 <210> SEQ ID NO 8  
73 <211> LENGTH: 21  
74 <212> TYPE: DNA  
75 <213> ORGANISM: Artificial Sequence  
76 <220> FEATURE:  
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80 <210> SEQ ID NO 9  
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PAGE: 3

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/205,658

DATE: 11/16/1999  
TIME: 16:33:52

Input Set: I205658.RAW

20

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100 <220> FEATURE:  
101 <221> NAME/KEY: misc\_feature  
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103 <223> OTHER INFORMATION: n = A,T,C or G  
104 <400> SEQUENCE: 11

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109	ctcggaaaca	ccactgagga	tatgaggctt	aagcagcagc	gaagctcgtc	gcgtgccacg	300
110	gagcacgata	ttgtcgacgg	caatcaccac	gacgacgagc	acatcacaa	gagacggctt	360
111	cgacttgtca	aaaattcgcg	gacgcggcgt	agaacgacgc	cggattcaag	tatggactgc	420
112	tatgaggaaa	accgcgcac	acaaaaactt	caataaatta	ttcttggatt	tctaaaaagt	480
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128	agtgtatoga	aaagtgtgat	gtcacctgt	accttctcct	tcaacgtcgt	tgtgtgacct	1440
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130	cggcaggcct	ttgctcggat	aaatgtcccg	atggttatca	aatcaaccgg	gatgatcatc	1560
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138	agetaatgtc	aaagttaa	ataccactcg	atccgataga	tcaatcagaa	gggacaaatg	2040
139	gtgagaaggn	aatctgtgag	gatattggcaa	tcaacgtgag	catcacagcg	gtcaacgcgg	2100
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141	tcggctacga	gctcttcttc	aaagaagtc	cacgaatcga	tgagaacatg	acgatcgaag	2220
142	aggatcgaag	tgctgtgtgc	gattcgtggc	agagtgtctt	caaacagtac	tacgagacgt	2280
143	cgaacgggtga	accgaccccg	gacattttta	tggatattgg	accgcgcgag	cgaattcggc	2340
144	cgaatacgcct	ctacgcgtac	tatgtggcga	cgcagatggt	gttgcatgcc	ggtgcgaaga	2400

W--OK

PAGE: 4

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/205,658

DATE: 11/16/1999  
TIME: 16:33:52

Input Set: I205658.RAW

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189	ggacgtatgc	tgggtgatgga	gattatgtgg	agagagatgt	tcgagagaat	gatgtgccaa	5100
190	cgcgacgaaa	tactgggtgca	tcaacatcaa	gttacacagg	tgggtgtcca	tattgcctaa	5160
191	caaatcggtg	tgggttcaaat	gaacgaggag	ccggtttcgg	tgaagcagta	cgattaactg	5220
192	atggtgttgg	aagtggacat	ttaaatgatg	atgattatgt	tgaaaaagag	atatcatcca	5280
193	tggatacgcg	ccggagcacg	ggcgccctga	gctcttctca	cggtgttcca	cagacgaatt	5340
194	ggagtggaaa	tcgtggtgcc	acgtattata	cgagtaaagc	tcaacaggca	gcaactgcag	5400

PAGE: 5

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/205,658

DATE: 11/16/1999  
TIME: 16:33:52

Input Set: I205658.RAW

```

195 cagcagcagc agcagcagct ctccaacagc aacaaaatgg tggtcgaggc gatcgattaa 5460
196 ctcaactacc cggaactgga catttacaat cgacacgtgg tggacaagat ggagattata 5520
197 ttgaaactga accgaaaaat tatagaaata atggatctcc atcgcgaaac ggcaacagcc 5580
198 gtgacatttt caacggacgt tcggctttcg gtgaaaatga gcatctaatac gaggataatg 5640
199 agcatcatcc acttgtctga aacccccaaa aaatcccgcc tcttaaatta taaattatct 5700
200 cccacattat catatctcta cacgaataac ggattttttt tcagattttt tctgaaaaat 5760
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202 <210> SEQ ID NO 12
203 <211> LENGTH: 1724
204 <212> TYPE: PRT
205 <213> ORGANISM: Caenorhabditis elegans
206 <400> SEQUENCE: 12
207 Met Thr Ser Leu Met Leu Leu Leu Leu Phe Ala Phe Val Gln Pro Cys
208 1 5 10 15
209 Ala Ser Ile Val Glu Lys Arg Cys Gly Pro Ile Asp Ile Arg Asn Arg
210 20 25 30
211 Pro Trp Asp Ile Lys Pro Gln Trp Ser Lys Leu Gly Asp Pro Asn Glu
212 35 40 45
213 Lys Asp Leu Ala Gly Gln Arg Met Val Asn Cys Thr Val Val Glu Gly
214 50 55 60
215 Ser Leu Thr Ile Ser Phe Val Leu Lys His Lys Thr Lys Ala Gln Glu
216 65 70 75 80
217 Glu Met His Arg Ser Leu Gln Pro Arg Tyr Ser Gln Asp Glu Phe Ile
218 85 90 95
219 Thr Phe Pro His Leu Arg Glu Ile Thr Gly Thr Leu Leu Val Phe Glu
220 100 105 110
221 Thr Glu Gly Leu Val Asp Leu Arg Lys Ile Phe Pro Asn Leu Arg Val
222 115 120 125
223 Ile Gly Gly Arg Ser Leu Ile Gln His Tyr Ala Leu Ile Ile Tyr Arg
224 130 135 140
225 Asn Pro Asp Leu Glu Ile Gly Leu Asp Lys Leu Ser Val Ile Arg Asn
226 145 150 155 160
227 Gly Gly Val Arg Ile Ile Asp Asn Arg Lys Leu Cys Tyr Thr Lys Thr
228 165 170 175
229 Ile Asp Trp Lys His Leu Ile Thr Ser Ser Ile Asn Asp Val Val Val
230 180 185 190
231 Asp Asn Ala Ala Glu Tyr Ala Val Thr Glu Thr Gly Leu Met Cys Pro
232 195 200 205
233 Arg Gly Ala Cys Glu Glu Asp Lys Gly Glu Ser Lys Cys His Tyr Leu
234 210 215 220
235 Glu Glu Lys Asn Gln Glu Gln Gly Val Glu Arg Val Gln Ser Cys Trp
236 225 230 235 240
237 Ser Asn Thr Thr Cys Gln Lys Ser Cys Ala Tyr Asp Arg Leu Leu Pro
238 245 250 255
239 Thr Lys Glu Ile Gly Pro Gly Cys Asp Ala Asn Gly Asp Arg Cys His
240 260 265 270
241 Asp Gln Cys Val Gly Gly Cys Glu Arg Val Asn Asp Ala Thr Ala Cys
242 275 280 285
243 His Ala Cys Lys Asn Val Tyr His Lys Gly Lys Cys Ile Glu Lys Cys
244 290 295 300

```

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.



Input Set: I205658.RAW

Line ? Error/Warning

Original Text

Line	Error/Warning	Original Text
139	W "N" or "Xaa" used: Feature required	gtgagaaggn aatctgtgag gatatggcaa tcaacgtg
710	W "N" or "Xaa" used: Feature required	ggntgggayt rnrtnrngc ncc
722	W "N" or "Xaa" used: Feature required	tgytgynnnnc cnaacngar
3067	W "N" or "Xaa" used: Feature required	Leu Cys Gly Xaa Xaa Leu Val Glu Ala Leu X
3071	W "N" or "Xaa" used: Feature required	Glu Gln Cys Cys Xaa Xaa Xaa Cys Xaa Xaa X
3266	W "N" or "Xaa" used: Feature required	Pro Cys Thr Xaa Xaa Xaa Gln Glu Asp Met A
3281	W "N" or "Xaa" used: Feature required	Leu Cys Asn Xaa Xaa Xaa Gln Glu Gly Lys A
3296	W "N" or "Xaa" used: Feature required	Ala Cys Glu Xaa Xaa Xaa Ser Thr Glu Val A
3311	W "N" or "Xaa" used: Feature required	Pro Cys Glu Xaa Xaa Xaa Gly Thr Glu Gln A
3326	W "N" or "Xaa" used: Feature required	Glu Cys Ser Xaa Xaa Xaa Ser Thr Asn Glu A
3341	W "N" or "Xaa" used: Feature required	Cys Asp Thr Xaa Xaa Xaa Asp Ser Ser Glu A
3356	W "N" or "Xaa" used: Feature required	Arg Gly Phe Xaa Xaa Xaa Leu Gln Lys Arg G
3371	W "N" or "Xaa" used: Feature required	Arg Gly Phe Xaa Xaa Xaa Thr Pro Lys Ser G
3386	W "N" or "Xaa" used: Feature required	Arg Gly Phe Xaa Xaa Xaa Lys Met Lys Arg G
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3416	W "N" or "Xaa" used: Feature required	Arg Gly Phe Xaa Xaa Xaa Ser Pro Lys Gly G
3431	W "N" or "Xaa" used: Feature required	Arg Gly Phe Xaa Xaa Xaa Pro Lys Gln Ile G
3446	W "N" or "Xaa" used: Feature required	Arg Gly Phe Xaa Xaa Xaa Ala Pro Gln Thr G
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3491	W "N" or "Xaa" used: Feature required	Arg Gly Phe Xaa Xaa Xaa Arg Arg Ser Arg G
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3521	W "N" or "Xaa" used: Feature required	Asn Tyr Asn Xaa Xaa Xaa Arg Arg Thr Arg G
3536	W "N" or "Xaa" used: Feature required	Ala Gly Val Xaa Xaa Xaa Arg Gly Lys Arg G
3551	W "N" or "Xaa" used: Feature required	Val Glu Lys Xaa Xaa Xaa Arg Gly Lys Arg G
3566	W "N" or "Xaa" used: Feature required	Val Glu Tyr Xaa Xaa Xaa Gly Lys Arg Ala G
3581	W "N" or "Xaa" used: Feature required	Gln Tyr Gln Xaa Xaa Xaa Gly Lys Arg Gln G
3596	W "N" or "Xaa" used: Feature required	Gln Tyr Gln Xaa Xaa Xaa Gly Lys Arg Gln G
3611	W "N" or "Xaa" used: Feature required	Gln Tyr Leu Xaa Xaa Xaa Gly Lys Arg Gly G
3626	W "N" or "Xaa" used: Feature required	Gln Leu Cys Xaa Xaa Xaa Gln Lys Arg Pro S
3641	W "N" or "Xaa" used: Feature required	Tyr Thr Thr Xaa Xaa Xaa Glu Ser Arg Pro S
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3671	W "N" or "Xaa" used: Feature required	Pro Arg Trp Xaa Xaa Xaa Ala Ala Ala Thr A
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6115	W "N" or "Xaa" used: Feature required	Gly Trp Asp Xaa Xaa Ile Ala Pro Lys
6615	W "N" or "Xaa" used: Feature required	Arg Xaa Xaa Ile Xaa Xaa Gly

PAGE: 1

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/205,658

DATE: 11/16/1999  
TIME: 16:33:52

Input Set: I205658.RAW

## PREVIOUSLY ERRORED SEQUENCES-EDITED

```

1 <210> 11
2 <211> 5816
3 <212> DNA
4 <213> Caenorhabditis elegans
5 <220>
6 <221> misc_feature
7 <222> (1)...(5816)
8 <223> n = A,T,C or G
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11 ctccccgaaa aaccaacaaa aaacacaagt ttttgaacac ttgtaaagtc agacagaacg 120
12 atgacgagaa tgaatattgt cagatgtcgg agacgacaca aaattttgga aaatttgga 180
13 gaagagaatc tcggcccgag ctgctcgctg acgacttcaa caaccgctgc caccgaagct 240
14 ctcggaacaa cactgagga tatgaggctt aagcagcagc gaagctcgtc gcgtgccacg 300
15 gagcacgata ttgtcgacgg caatcaccac gacgacgagc acatcacaat gagacggctt 360
16 cgacttgtca aaaattcgcg gacgcggcgt agaacgacgc ccgattcaag tatggactgc 420
17 tatgaggaaa acccgccatc acaaaaactt caataaatta ttcttggtatt tctaaaaagt 480
18 catcaatgac gtcattaatg cttttactgc ttttcgcttt tgtacagccg tgtgcctcaa 540
19 tagtcgaaaa acgatgcggc ccaatcgata ttcgaaatag gccgtgggat attaagccgc 600
20 aatggtcgaa acttggtgat ccgaacgaaa aagatttggc tggtcagaga atgggtcaact 660
21 gcacagtggg ggaagggttcg ctgacaatct catttgtact gaaacacaag acaaaagcac 720
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23 cgcatctacg tgaaattact ggaactctgc tcgtttttga gactgaagga ttagtggatt 840
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25 cgctgataat ttatcgaaat cgggatttgg agatcggctt tgacaagctt tccgtaattc 960
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48	cgaacggtga	acaccccg	gacattttta	tggatattgg	acgcgag	cgaattcggc	2340
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PAGE: 2

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/205,658

DATE: 11/16/1999

TIME: 16:33:52

Input Set: I205658.RAW

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PAGE: 3

**RAW SEQUENCE LISTING**  
PATENT APPLICATION US/09/205,658DATE: 11/16/1999  
TIME: 16:33:52

Input Set: I205658.RAW

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103	gtgacatttt	caacggacgt	tcggctttcg	gtgaaaatga	gcataatac	gaggataatg	5640
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